

REMARKS

In response to the final Office Action dated April 21, 2006, claims 1, 14, 20, 22, and 26 have been amended. Therefore, claims 1-7, 9, 11-15, and 18-32 remain in the case. The Applicants respectfully request that this amendment be entered under 37 C.F.R. 1.111 to place the above-referenced application in condition for. In light of the amendments and arguments set forth herein, reexamination and reconsideration of the application are requested.

Section 103(a) Rejections

The final Office Action rejected claims 1-7, 9, 11-15, and 18-32 under 35 U.S.C. § 103(a) as being unpatentable over Bayer et al. (U.S. Patent No. 6,311,190) in view of Oracle 8i. Oracle 8i is described in two papers: "Programming Environments for Oracle Objects", pp. 1-18 (hereinafter referred to as Reference A, and "Programmatic Environments", pp. 1-27 (hereinafter referred to as Reference B).

The Office Action stated that Bayer et al. disclose all elements of the Applicants' claimed invention except that Bayer et al. do "not teach high density voting over a computer network using an object residing on a server that maintains persistent connections between the object and a database; caching the votes received in a memory cache using the object; using the cached votes in calculating a result." However, the Office Action stated that "the concept of using objects in a memory cache to provide a buffer to enable high performance access to a database is a well-known concept, as evidenced by Oracle 8i." Therefore, the Office Action asserted that it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the teachings of Bayer and Oracle 8i to arrive at the Applicants' claimed invention.

In response, the Applicants respectfully traverse these rejections based on the amendments to claims 1, 14, 22, and 26, and the following legal and technical analysis. It is the Applicants' position that the combination of Bayer et al. and the Oracle 8i papers (References A & B) is lacking at least one material element of the Applicants' claimed invention. In particular, the combination does not disclose, either explicitly or

implicitly, the material claimed feature of tabulating in memory cached votes accumulated over a predefined time interval to generate intermediate voting results and writing the results and each raw vote accumulated over the interval to a database.

Further, the combination of Bayer et al. and the Oracle 8i papers fails to appreciate the advantages of this claimed feature. Thus, the Applicants submit that the combination of Bayer et al. and the Oracle 8i papers cannot make obvious this claimed feature of the Applicants' invention.

To make a prima facie showing of obviousness, all of the claimed features of an Applicant's invention must be considered, especially when they are missing from the prior art. If a claimed feature is not disclosed in the prior art and has advantages not appreciated by the prior art, then no prima facie showing of obviousness has been made. The Federal Circuit Court has held that it was an error not to distinguish claims over a combination of prior art references where a material limitation in the claimed system and its purpose was not taught therein. *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988). Moreover, as stated in the MPEP, if a prior art reference does not disclose, suggest or provide any motivation for at least one claimed feature of an Applicants' invention, then a prima facie case of obviousness has not been established (MPEP § 2142).

Amended Independent Claims 1, 14, 22 and 26

Amended independent claim 1 of the Applicants' claimed invention includes a method for facilitating interactive voting over the Internet during a corresponding live television broadcast event. The method includes presenting a survey question and a plurality of responses to voters viewing the live television broadcast event, directing the voters to cast votes over the Internet at a web site of a sponsor of the live television broadcast event, receiving votes at a web site server in response to the survey question, and providing a Live Event Object residing on the server that maintains persistent connections between the Live Event Object and a database. The method further includes caching the votes received in a memory cache for a predefined time interval using the Live

Event Object, tabulating in memory the cached votes accumulated over the predefined time interval to generate intermediate voting results, writing the intermediate voting results and each raw vote accumulated over the predefined time interval to the database at the predefined interval, computing in real time a final voting result to the survey question by continuously tallying each of the intermediate voting results written in the database, and presenting the final voting results to viewers on the live television broadcast event prior to its conclusion.

Amended independent claim 14 of the Applicants' claimed invention includes an interactive voting system using a computer network. The system includes a server in communication with the computer network for receiving votes from a plurality of voters in response to a polling question presented to the voters during a live broadcast event that directs the plurality of voters to respond to the polling question by visiting a web site. The system further includes an object residing in memory on the server for caching the votes received during a predefined time interval and summing the votes accumulated during that predefined time interval to compute an intermediate voting result, wherein the object is a non-relational object. The system also includes a database having a connection with the object that receives and writes the intermediate voting result and each raw vote received during the predefined time interval to the database at the predefined time interval, such that a plurality of intermediate voting results for different time intervals are generated, tabulating a final voting result in real time by summing each of the plurality of intermediate voting results, and presenting the final voting result during the live broadcast event.

Amended independent claim 22 of the Applicants' claimed invention includes an interactive voting system that uses a computer network to process voting data in response to a survey question asked during a live television broadcast. The system includes a Live Event Vote Server in communication with the computer network and accessible at a web site of a sponsor of the live television broadcast, and a Live Event Object residing in memory on a Live Event Vote Server. The Live Event Object receives and caches voting data over a predefined time interval from a client in communication with the computer network. The voting data represents responses to the survey questions given by viewers

of the live television broadcast after having visited the sponsor's web site. The Live Event Object tabulates the cached voting data accumulated over the predefined time interval to generate an intermediate voting result, and writes the intermediate voting results and each raw vote accumulated over the predefined time interval to a Live Event Database through persistent connections between the Live Event Object and the Live Event Database such that the intermediate voting result is used to compute a final voting result in real-time and the final voting result is presented to television viewers during the live television broadcast.

Amended independent claim 26 of the Applicants' claimed invention includes in a computer network having a plurality of clients and a server, a computer-implemented method for providing interactive voting over the Internet during a live television broadcast. The method includes presenting a survey question and a number of responses to voters viewing the live television broadcast, directing voters viewing the live television broadcast to vote for one or more of the responses by using the plurality of clients to visit a web site of a sponsor of the live television broadcast, transmitting votes submitted by the voters using the plurality of clients over the Internet to the server located at the sponsor's web site, and providing an object resident in memory on the server that contains procedures and instructions for manipulating the votes. The method further includes accumulating votes in the memory in a cache during a predefined time interval, tabulating in memory the accumulated cached votes at the end of the predefined time interval to generate an intermediate voting result, and writing the intermediate voting result and each raw vote accumulated over the predefined time interval to a database at the end of the predefined time interval. The method further includes establishing and maintaining a persistent connection between the object and the database to facilitate writing of the intermediate voting results, repeating the accumulation of votes and the writing of intermediate results to the database to obtain a plurality of intermediate results, tabulating the plurality of intermediate results to obtain a final voting result in real time, and presenting the final voting results within time constraints of the live television broadcast.

"Votes received by the LEO 355 are cached into the Voting Cache 380 for a predefined time interval and then processed as a batch. In a preferred embodiment, the

LEO 355 processes the cached votes every 15 seconds. Alternatively, a different time interval may be selected by a user. The LEO 355 obtains the votes in the batch and tabulates the votes accumulated within the batch for the predefined time interval. These intermediate voting results are then written to the Live Event Database 315. In order to support cross-tabulation of demographic data, raw votes are also written to the Live Event Database 315" (specification, page 12, lines 19-26). Thus, in the Applicants' claimed invention votes are cached in memory for a time period, and at the end of that time period the accumulated votes are tallied the tallied result as well as the raw votes used to obtain the results are written to a database.

In contrast, Bayer et al. merely writes the votes of a voter to the database one at a time. A summary then can be generated based on the current votes received. In particular, in Bayer et al., the "network server receives the answers to the questions of the survey and adds those answers representing votes to records in the database tallying totals for each response answered . . . " (col. 3, lines 7-9; emphasis added). Bayer et al. then "generates a summary . . . for each response for each question of the survey . . . " (col. 3, lines 11-14). Nowhere in Bayer et al. is the Applicants' claimed feature of tabulating in memory cached votes accumulated over a predefined time interval to generate intermediate voting results and writing the results and each raw vote accumulated over the interval to a database discussed or suggested.

The Oracle 8i papers, namely, Reference A and Reference B, add nothing to the cited combination that would render the Applicants' claimed invention obvious. Reference A and B merely discuss accessing and storing data in a database. In particular, these papers discuss caching objects for effective program interface purposes. However, the Applicants' material claimed feature of tabulating in memory cached votes accumulated over a predefined time interval to generate intermediate voting results and writing the results and each raw vote accumulated over the interval to a database is not discussed or suggested.

Consequently, no motivation or suggestion for the claimed feature of the Applicants' invention is provided. Absent this teaching, motivation or suggestion, the combination of Bayer et al. and References A and B cannot render the Applicants' claimed invention obvious (MPEP § 2143.01).

The combination fails to appreciate or recognize the advantages of the Applicants' claimed feature of tabulating in memory cached votes accumulated over a predefined time interval to generate intermediate voting results and writing the results and each raw vote accumulated over the interval to a database. More specifically, vote caching and tabulating the cached votes in memory at a predefined time interval allow "intermediate voting results to be tabulated continuously to generate final voting results much faster than can be obtained by tabulating each vote individually" (specification, page 6, lines 3-5). Moreover, "unlike previous interactive voting techniques that tabulate results after all the votes have been received, the present invention computes intermediate voting results at specified intervals to enable rapid and real-time tabulation of final voting results" (specification, page 6, lines 5-9). Neither Bayer et al., Reference A, nor Reference B discuss or appreciate these advantages of the Applicants' claimed feature.

The Applicants, therefore, submit that obviousness cannot be established since the combination of Bayer et al., Reference A, and Reference B, fails to teach, disclose, suggest or provide any motivation for the Applicants' material claimed feature of tabulating in memory cached votes accumulated over a predefined time interval to generate intermediate voting results and writing the results and each raw vote accumulated over the interval to a database. In addition to explicitly lacking this feature, the combination of Bayer et al., Reference A, and Reference B also fails to implicitly disclose, suggest, or provide motivation for this feature. Further, the combination of Bayer et al., Reference A, and Reference B fails to appreciate advantages of this claimed feature.

Therefore, as set forth in *In re Fine* and MPEP § 2142, the combination of Bayer et al., Reference A, and Reference B does not render the Applicants' claimed invention obvious because the references are missing at least one material feature of the Applicants' claimed invention. Consequently, because a prima facie case of obviousness cannot be established due to the lack of "some teaching, suggestion, or incentive supporting the combination", the rejection must be withdrawn. ACS Hospital Systems, Inc. v. Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); MPEP 2143.01.

Accordingly, the Applicants respectfully submit that independent claims 1, 14, 22 and 26 are patentable under 35 U.S.C. § 103(a) over Bayer et al. in view of Oracle 8i (References A and B) based on the amendments to claims 1, 14, 22, and 26 and the legal and technical arguments set forth above. Moreover, claims 2-7, 9, and 11-13 depend from amended independent claim 1, claims 15, and 18-21 depend from amended independent claim 14, claims 23-25 depend from amended independent claim 22, and claims 27 and 29 depend from amended independent claim 26 and are also nonobvious over Bayer et al. in view Oracle 8i (MPEP § 2143.03). The Applicants, therefore, respectfully request reexamination, reconsideration and withdrawal of the rejection of claims 1-7, 9, 11-15, and 18-32.

Conclusion


Because the Applicants' claimed invention includes features neither taught, disclosed nor suggested by the art cited in the Office Action, the Applicants respectfully submit that the rejections of claims 1-7, 9, 11-15, and 18-32 has been overcome.

The Applicants, therefore, submit that claims 1-7, 9, 11-15, and 18-32 of the subject application are in condition for immediate allowance. The Examiner, therefore, is respectfully requested to withdraw the outstanding rejections of the claims and to pass all of the claims of this application to issue.

In an effort to expedite and further the prosecution of the subject application, the

Applicants kindly invite the Examiner to telephone the Applicants' attorney at (805) 278-8855 if the Examiner has any comments, questions or concerns, wishes to discuss any aspect of the prosecution of this application, or desires any degree of clarification of this response.

Respectfully submitted,
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